

Symmetry of single chain DNA molecules

Leont'ev A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

A system of "colour" transformations of symmetry is introduced on the basis of which all possible symmetry groups of the single-chain DNA molecule taken in the form of a genetic text are derived. A strict theoretical group description of such functionally important symmetrical structures as a palindrome, complementary palindrome and direct repeat is given and their possible role in the genome discussed. © 1993.
